

# Claims

- [c1] 1.A portable electronic apparatus having a character recognition function, comprising:  
a host body, having a host circuit and a character recognition circuit, wherein the character recognition circuit is electrically coupled to the host circuit, and the character recognition circuit serves to transform a digital image to a digital text document;  
an image input unit, coupled to the host circuit;  
an image output unit, coupled to the host circuit; and  
an instruction input unit, coupled to the host circuit.
- [c2] 2.The apparatus as recited in claim 1, wherein the image output unit and the instruction input unit comprise a touch screen display.
- [c3] 3.The apparatus are recited in claim 1, wherein the host body further comprises a wireless communication circuit coupled to the host circuit.
- [c4] 4.The apparatus as recited in claim 3 further comprising an audio output and an audio input output unit, coupled to the host circuit.

- [c5] 5.A character recognition method, for a portable electronic apparatus, wherein the portable electronic apparatus has an image input unit, the method comprising: capturing an analog image from the image input unit; transforming the analog image into a digital image; and recognizing the digital image as a digital text document.
- [c6] 6.The method as recited in claim 5, wherein the step of recognizing the digital image as a digital text document comprising:  
dividing the digital image into a plurality of digital image areas according to a character distribution of the digital image; and  
recognizing the digital image area as a plurality of digital characters, and assembling the digital characters into the digital text document.
- [c7] 7.The method as recited in claim 6, wherein the step of recognizing the digital image areas as the digital characters comprising:  
dividing each of the digital image areas into at least a characteristic stroke; and  
recognizing each the characteristic stroke as one of the digital characters.
- [c8] 8.The method as recited in claim 7, wherein the step of recognizing as the digital image characters comprising

correcting the digital characters.